Menu of Possible Interventions for Academic for Students with Disabilities
Guidance, Practices, Programs, Strategies and Resources

School Literacy Interventions

- Design instruction according to Universal Design principles: multiple means of engagement, multiple means of response, multiple means of access to content material
- Use of assistive technology to provide access to content material- text to speech, e-readers
- Ongoing embedded professional development in how to:
    - Use evidence-based content enhancement strategies like those proposed by Donald Deschler and Jean Schumaker,
    - Embed scaffolds and supports to increase literacy independence,
    - Match readers to text
    - Implement metacognitive teaching and cooperative learning strategies like Cooperative Integrated Reading and Composition (CIRC) , Peer Assisted Learning Strategies (PALS) and Direct Instruction/Corrective Reading
    - Diagnose reading difficulty (s) and identify evidence based appropriate interventions
    - Implement interventions with fidelity
    - Collection and analysis of data to make instructional decisions
    - Use questions to improve student comprehension and question-answer relationships
    - Build background knowledge and vocabulary
    - Locate accessible instructional materials- Bookshare, NIMAC and North Dakota Vision Services/School for the Blind
    - Evaluating instructional materials for accessibility
- Direct vocabulary instruction and word learning strategies
- Direct explicit instruction regarding content text features, adjusting reading rate according to text demands, extracting meaning from complex texts, and content literacy processes
- Direct explicit instruction on the application and use of newly acquired reading skills
- Daily exposure to a fluent adult reader reading aloud
- Provide multiple opportunities to read and discuss text

School Mathematics Interventions

- Design instruction according to Universal Design principles: multiple means of engagement, multiple means of response, multiple means of access to content material
- Use of assistive technology to provide access to mathematics texts - text to speech, e-readers
- Systematic and explicit instruction in the use and application of mathematical processes and problem solving strategies
- Direct instruction in how to read and work within the language of mathematics, especially vocabulary, symbols and diagrams
- Direct instruction in the structure and semantic clues of word problems
- Ongoing professional development on :
    - Developing prompts and solution-oriented questions to promote self-instruction

- Implementing an effective peer tutoring program for mathematics with students with disabilities: Classwide Peer Tutoring (CWPT), Peer Assisted Learning Strategies (PALS) or Reciprocal Peer Tutoring (RPT)
- Designing highly structured activities or teaching routines for peer tutoring sessions
- Using the Concrete-Representational-Abstract techniques incorporating manipulatives and other visual representations
- Collection and analysis of data to make instructional decisions
- Understanding the components of instructional episodes: pacing, feedback, responses, listening and monitoring
- Using mnemonics and other scaffolds to promote self monitoring of learning and self-instruction
- Understanding the influence reading difficulties have on success in mathematics and identifying strategies to mitigate this influence
- Developing systematic instructional strategies for teaching the language of mathematics, especially its vocabulary
- Developing a common pedagogy and progression of mathematics instruction within the school and grade level
- Developing a common process for students to justify or explain their work and multiple opportunities to do so

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http://aim.cast.org/learn/historyarchive/backgroundpapers/technologies_supporting

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National Institute for Direct Instruction

The Access Center:
http://www.k8accesscenter.org/training_resources/DirectExplicitInstruction_Mathematics.asp or

http://www.k8accesscenter.org/training_resources/Strategy_ImplicitInstructionandMath.asp

http://www.k8accesscenter.org/training_resources/mathprimaryproblemsolving.asp

http://www.k8accesscenter.org/training_resources/MathPrblSlving_upperelem.asp

Special Connections' Direct Instruction: Math:
http://www.specialconnections.ku.edu/?q=instruction/mathematics

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University of Nebraska-Lincoln's Cognitive Strategy Instruction: Math:

Vanderbilt's Peer-Assisted Learning Strategies (PALS): http://kc.vanderbilt.edu/pals/math.html

The Center for Effective Collaboration and Practice's Classwide Peer Tutoring: Information for Families: http://cecp.air.org/Peer_Tutoring.pdf

Special Connection's Concrete-Representational-Abstract (C-R-A) Instruction: http://www.specialconnections.ku.edu/?q=instruction/mathematics/teacher_tools/concrete_to_representational_to_abstract_instruction

Math VIDS': http://www.coedu.usf.edu/main/departments/sped/mathvids/index.html

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